

CLAIMS

1. A surface mountable clip, comprising:
a metal structure having a plurality of planar sides generally formed into a U-shape;
5 an opening formed by the metal structure being sized to receive and retain an electrical component;
a bottom planar side of the metal structure for mounting the generally U-shaped metal structure on a printed circuit board (PCB); and
a hole formed through the bottom planar side.

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2. The surface mountable clip of claim 1, wherein the hole formed through the bottom planar side is configured to break a surface tension of molten solder over a solder pad of the PCB during a reflow soldering process.

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3. The surface mountable clip of claim 1, further comprising:
a first leg extending laterally from the bottom planar side.

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4. The surface mountable clip of claim 1, further comprising:
a first leg extending laterally from a first edge of the bottom planar side; and
a second leg extending laterally from a second edge of bottom first planar side which is opposite the first edge.

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5. The surface mountable clip of claim 1, further comprising:
a first notch formed along a first edge of the bottom planar side.

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6. The surface mountable clip of claim 1, wherein the generally U-shaped metal structure is a single integrally formed structure.

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7. The surface mountable clip of claim 1, wherein the generally U-shaped metal structure comprises a polygon-shaped metal structure.

8. The surface mountable clip of claim 1, wherein the generally U-shaped metal structure is formed with at least seven planar sides.

9. The surface mountable clip of claim 1, comprising an antenna clip configured
5 to receive and retain an electrical component comprising an antenna.

10. The surface mountable clip of claim 1, further comprising:
a first leg extending laterally from the bottom planar side; and
wherein the first leg is utilized by a vision system to position the clip onto a printed
10 circuit board (PCB).

11. A printed circuit board (PCB) comprising:
a substrate;
a solder pad formed over the substrate;
15 a surface mountable clip which includes:
a metal structure having a plurality of planar sides generally formed into a U-
shape;
an opening formed by the generally U-shape metal structure being sized to
receive and retain an electrical component;
20 a bottom planar side which is mounted over the solder pad to support the
generally U-shaped metal structure; and
a hole formed through the bottom planar side.

12. The PCB of claim 11, wherein the clip further comprises:
25 a first leg extending laterally from the first planar side.

13. The PCB of claim 11, wherein the clip further comprises:
a first leg extending laterally from a first edge of the first planar side; and
a second leg extending laterally from a second edge of the first planar side which is
30 opposite the first edge.

14. The PCB of claim 11, wherein the clip further comprises:
a first notch formed along a first edge of the bottom planar side.

15. The PCB of claim 11, wherein the generally U-shaped metal structure is a
5 single integrally formed structure.

16. The PCB of claim 11, wherein the generally U-shaped metal structure
comprises a polygon-shaped metal structure.

10 17. The PCB of claim 11, wherein the generally U-shaped metal structure has at
least seven planar sides.

18. The PCB of claim 11, wherein the surface mountable clip comprises an
antenna clip.

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19. The PCB of claim 11, further comprising:
a first leg extending laterally from the bottom planar side; and
wherein the first leg is utilized by a vision system to position the clip onto the PCB.

20 20. The PCB of claim 11, further comprising a second surface mountable clip
mounted on the PCB for further retaining the electrical component.

21. A mobile communication device comprising:
a printed circuit board (PCB);
a radio frequency (RF) transceiver carried on the PCB;
an antenna coupled to the RF transceiver;
at least one surface mountable antenna clip carried on the PCB which retains the
antenna;
the at least one surface mountable antenna clip including:
30 a metal structure having a plurality of planar sides generally formed into a U-
shape;

an opening formed by the generally U-shape metal structure being sized to receive and retain the antenna;

a bottom planar side which is mounted over a solder pad on the PCB to support the generally U-shaped metal structure; and

5 a hole formed through the bottom planar side.

22. The mobile communication device of claim 21, wherein the clip further comprises:

a first leg extending laterally from the first planar side.

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23. The mobile communication device of claim 21, wherein the clip further comprises:

a first leg extending laterally from a first edge of the first planar side; and

15 a second leg extending laterally from a second edge of the first planar side which is opposite the first edge.

24. The mobile communication device of claim 21, wherein the clip further comprises:

a first notch formed along a first edge of the bottom planar side.

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25. The mobile communication device of claim 21, wherein the generally U-shaped metal structure is a single integrally formed structure.

26. The mobile communication device of claim 21, wherein the generally U-
25 shaped metal structure comprises a polygon-shaped metal structure.

27. The mobile communication device of claim 21, wherein the generally U-shaped metal structure is formed with at least seven planar sides.

30 28. The mobile communication device of claim 21, wherein the bottom planar side is generally rectangular.

29. The mobile communication device of claim 21, wherein the at least one surface mountable antenna clip comprises a second surface mountable antenna clip for further retaining the antenna.

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30. The mobile communication device of claim 21, further comprising:
a first leg extending laterally from the bottom planar side; and
wherein the first leg is utilized by a vision system to position the clip onto the PCB.

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